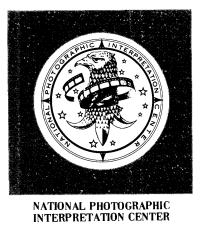
Top Secret



INTERPRETATION REPORT

PHOTOGRAPHIC

ROCKET MOTOR PRODUCTION AT KAMENSK-SHAKHTINSKIY SOLID MOTOR PRODUCTION PLANT

25X1

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25X1

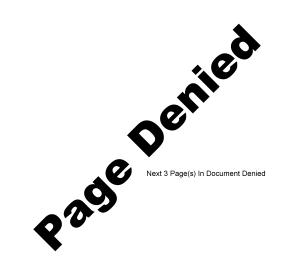
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NSTALLATION OR ACTIVITY NAME			COUNTRY
Rocket Motor Production at Kame	ensk-Shakhtinskiy Chemical Cor	nbine 101	UR
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EQUIREMENT	NA NPIC PROJECT		
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	INTRODUCTION		
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probably in production at the I This is evidenced b	SS-13 ICBM and/or the first stage Kamensk-Shakhtinskiy Solid Mo y the recent identification, and lo able in size to the known dimens	otor Product ocation withi	ion Plant25X1 n the plant, 025X1
2. The plant (Figure 1), a plant the western edge of Kamensk-S It contains a single-base propel motor production area and a co	part of Kamensk-Shakhtinskiy C hakhtinskiy about 60 nautical m lant production area, a double-k mposite-propellant rocket motor , a propellant and munitions store	niles (nm) no pase propella production	orth of Rostov. Int and rocket area. Support
	DESCRIPTION		
Rocket Motor Production			
motor production area in Feb preparation building, appeared western end of the area for fillisequivalent SS-14.	s were first identified in the coruary 1971. The chambers, ob to be ready for movement to thing with propellant (Figure 2). The to the second stage of the SS-1	served near ne casting by he chambers .3 and the fir	the chamber all dings at the are 25X1 stage of th 25X1
the fabrication area since 1965,	tor crates or containers (Table 1) now identified as rocket motor of chambers seen in the composit	chambers, sl	nows that they
the northeastern part of the plant the foundry and shop building of the chambers probably tall northwest of the foundry and slate to the transshipment buildings	bers are manufactured in the fab ant. Initial production steps are on the south side of the area. Fin kes place in the two shop and hop building. The chambers are in the northern part of the fabric	probably ac al inspection l assembly moved by tr	complished in and finishing buildings just ansport trailer
to the composite-propellant rock	ket motor production area.		
6. The further processing rocket motors is accomplished (Figure 4) in the southwestern preparation, propellant mix, m considered to be the only area a	ket motor production area. of the fabricated rocket motor in the composite-propellant roc part of the plant. This area consistor casting and curing, and finit Kamensk-Shakhtinskiy capable	ket motor pr sts of facilition ishing and in	roduction area es for chamber aspection. It is
6. The further processing rocket motors is accomplished (Figure 4) in the southwestern preparation, propellant mix, m considered to be the only area a motors.	ket motor production area. of the fabricated rocket motor in the composite-propellant roc part of the plant. This area consistor casting and curing, and fin	ket motor pr sts of facilition ishing and in e of producin	roduction area es for chamber aspection. It is ag large rocket
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Table 2. Buildings Destroyed in The Composite-Propellant Rocket Motor Production Area and Rocket Motor Test Facility

Building	Extent of Damage	Remarks	Estimated Time Period of Nonoperational Status	25X1
Southern mix bldg	Complete destruction	Replacement is smaller than the original bldg	5½ months	
Southern casting bldg	Northern half of bldg destroyed	, , , , , , , , , , , , , , , , , , ,	5 months	
Middle casting bldg	Complete destruction		5½ months	
Northern casting bldg	Complete destruction	Nearly completely rebuilt on Mar 69	8 months	
Large test cell		Derailed car, which	9½ months	25X1
bldg	crack in tabular extension of test cell	restricted access to the test cell & prob rendered it inactive, was present on 11 Dec 68 photography		
Middle casting bldg	Complete destruction	Nearly completely rebuilt	5 months	25 X 1
Five-bay curing bldg	Back walls of all 5 bays & roof of one bay missing; roof of other 4 bays damaged; rail spurs removed	Reconstruction underway		

25X1

	25X
7. The composite-propellant rocket motor production area is the newest part amensk-Shakhtinskiy plant. The northern section was first observed under construction april 1962, and construction of the southern section began in 1964. The busential to the production of a rocket motor were complete in mid-1964. Pipelines a urs were identified in January 1965. The area probably had an operational cap metime between mid-1964 and early 1965.	ruction iildings and rail
8. The composite-propellant rocket motor production area has had a full proc pability only about half the time since it initially went into operation. Key struction hazardous processes have been destroyed on several occasions (Table 2). It is destruction appeared to be the result of accidents. However, some of the fulldings may have been razed so that modified buildings could be erected. The so ix building, a key structure, was totally destroyed by an accident sometime. This could indicate that the plant was in procior to September 1965.	uctures Most of casting outhern 25X
9. Only three composite- or composite-modified double-base (CMDB) pro	pellant
ants in the Soviet Union were operational in 1965. The CMDB plants at Biysk and the composite-propellant area at Kamensk-Shakhtinskiy are the only stallations which could have produced rocket motors for the early SS-13 and issiles. No rocket motors equivalent to the size of the second stage of the SS-13 as st stage of the SS-14 have been identified at Biysk or Perm on large-scale photographs.	d Perm known SS-14 and the
10. There also is a good correlation between the initial operational dates mposite-propellant area at Kamensk-Shakhtinskiy and initial flight-testing of the d SS-14 missiles. The SS-14, originally designated the KY-5, was first flight-te ptember 1965 from Kapustin Yar. ³ The SS-13, originally designated the KY-6, w ght-tested in February 1966 from Kapustin Yar. ⁴ Both the SS-13 (SAVAGE) misse SS-14 (SCAMP) TEL were first observed in Moscow parades in 1965.	e SS-13 ested in vas first
REFERENCES	
	25X
MAPS OR CHARTS	
MAPS OR CHARTS ACIC. US Air Target Chart, Series 200, Sheet 0234-24, scale 1:200,000	
ACIC. US Air Target Chart, Series 200, Sheet 0234-24, scale 1:200,000 DOCUMENTS 1. NPIC RCA-09/0005/69, Kamensk-Shakhtinskiy Chemical Combine 101, Dec 68 (TO)	_P 25X
ACIC. US Air Target Chart, Series 200, Sheet 0234-24, scale 1:200,000 DOCUMENTS 1. NPIC RCA-09/0005/69, Kamensk-Shakhtinskiy Chemical Combine 101, Dec 68 (TOSECRET RUFF) 2. NPIC Advanced Solid Propellant Production Area, Chemical Combine 101, Kamensk-	
ACIC. US Air Target Chart, Series 200, Sheet 0234-24, scale 1:200,000 DOCUMENTS 1. NPIC RCA-09/0005/69, Kamensk-Shakhtinskiy Chemical Combine 101, Dec 68 (TOSSECRET RUFF)	

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